California Regional Water Quality Control Board
Santa Ana Region

September 6, 2002

ITEM: 11

SUBJECT: Waste Discharge Requirements for Jack Tuls, dba Jack Tuls & Sons Dairy, 38980 Record Road, San Jacinto, Riverside County, Order No. R8-2002-0027 (NPDES No. CA8000397)

INTRODUCTION:

In response to a request from Regional Board staff, on June 6, 2002, Mr. Jack Tuls submitted a report of waste discharge for his existing dairy at 38980 Record Road, San Jacinto, Riverside County. Mr. Tuls' existing waste discharge requirements need to be revised to add the environmental mitigations that were included in his waste discharge requirements (Order No. 93-71) that were adopted by the Regional Board in 1993. Order No. 93-71 was mistakenly rescinded in 1999 and Mr. Tuls was automatically issued authorization to discharge wastes under the Board's general NPDES permit for Concentrated Animal Feeding Operations (CAFOs), Order No. 99-11. The general permit does not subject Mr. Tuls to the environmental mitigations that were previously deemed necessary. Therefore, revised waste discharge requirements are necessary to add these environmental mitigations.

DISCUSSION:

Regulatory History:

In 1984, Mr. Jack Tuls was issued waste discharge requirements, Order No. 84-21, for the discharge of dairy wastes from his new dairy in San Jacinto. Order No. 84-21 required, in part, that Mr. Tuls protect the dairy from 100-year frequency floods, provide adequate containment to store all dairy wastewater including runoff from a 25-year 24-hour rainfall event, and, annually, submit a technical report for the amount and destination of manure removed from the facility. These requirements were consistent with waste discharge requirements that were issued to all dairies in the region at that time. The animal population of this dairy was approximately 1,490 animals.

By 1990, Mr. Tuls had increased the animal population of his dairy to approximately 5,000 animals. Regional Board staff informed Mr. Tuls that revised waste discharge requirements would be required because of the significant increase in animals. Also, Regional Board staff had received several complaints from nearby neighbors regarding nuisance fly and odor conditions. The Regional Board conducted a public hearing to determine the significance of the fly and odor conditions at the dairy. Following the public hearing, the Regional Board determined that a "significant public controversy" existed regarding the fly and odor conditions, and the Board required that a focused Environmental Impact Report be prepared. Subsequently, Mr. Tuls proposed to reduce his herd size and implement mitigation measures to address flies and odors. Based on this proposal, the Regional Board adopted a Negative Declaration, finding that there would not be a significant impact to the environment if mitigation measures were implemented for the control of flies and odors. It was also

determined that groundwater monitoring should be conducted to assure that the discharge of dairy wastes did not impact the beneficial uses of the San Jacinto Intake and the Upper Pressure Groundwater Subbasin.

In December of 1993, Mr. Tuls was issued revised waste discharge requirements, Order No. 93-71. In addition to the requirements that were contained in Order No. 84-21, these revised waste discharge requirements limited the total animal population of this dairy to 3,200 animals, prohibited the raising of calves, required that all manure be removed offsite on a regularly scheduled basis, required the development and implementation of a groundwater monitoring program, and required the submittal of quarterly reports of the fly and odor mitigation measures taken by Mr. Tuls. In regards to groundwater monitoring, the Regional Board accepted Mr. Tuls' participation in a comprehensive regional groundwater monitoring program, in conjunction with the Eastern Municipal Water District (EMWD), in lieu of the installation of groundwater monitoring wells by Mr. Tuls. Groundwater monitoring reports were required to be submitted on a semi-annual basis.

The groundwater monitoring program was intended to be a comprehensive program for monitoring changes in groundwater quality that could possibly be attributed to the operation of the Jack Tuls Dairy. The Regional Board communicated orally and in writing with Mr. Tuls, the Milk Producers Council (an organization which represents dairymen in the San Jacinto and Chino area) and EMWD in order to establish the scope of the monitoring program. While a formal agreement between Mr. Tuls and the Regional Board regarding the scope of the groundwater monitoring program was never agreed upon and finalized, the Regional Board did receive monitoring data from EMWD for wells at and surrounding Mr. Tuls' dairy.

The EMWD submitted semi-annual groundwater monitoring reports from November 1994 through November 1996. The EMWD did not regularly submit monitoring reports between November 1996 and February 1998 due to the lack of any change in the groundwater quality during that period. The February 1998 report, the last report, contained groundwater data for the Spring, Summer and Fall of 1996 and 1997. These reports did not demonstrate any impacts to groundwater as a result of the discharge of wastes by the dairy. However, the wells were not ideally located, which is why a formal groundwater monitoring agreement was never agreed upon and finalized.

Quarterly fly and odor mitigation monitoring reports were submitted from January 1994 through the 3rd quarter of 1995 by the Milk Producers Council. The monitoring period from the 3rd quarter of 1995 through September 2000 was represented in a brief summary report submitted by Mr. Tuls on September 26, 2000. These reports indicate that all appropriate mitigation measures were being implemented.

In August 1999, the Regional Board adopted General Waste Discharge Requirements for Dairies and Related Facilities, Order No. 99-11 (NPDES No. CAG018001). On September 9, 1999, Mr. Tuls' waste discharge requirements, Order No. 93-71, were mistakenly rescinded and Mr. Tuls was automatically granted authority to discharge waste in accordance with the terms and conditions of Order No. 99-11. Order 99-11 does not contain the environmental mitigations that were included in Order No. 93-71.

Regional Board staff has received several complaints of fly and odor nuisances from the Golden Era Productions facility located northwest of Jack Tuls Dairy and from other nearby neighbors since 1990. Regional Board staff immediately conducted follow-up inspections on each of these complaints, but found minimal or no nuisance conditions at the time of the inspections.

Facility Description:

The existing dairy is defined as a Concentrated Animal Feeding Operation (CAFO), according to 40 CFR 122.23. The dairy is reported to currently have 2,617 milking cows, 281 dry cows and 300 heifers. The facility reportedly produces approximately 113,400 gallons of process wastewater per day. Total acreage of the dairy is approximately 156 acres. The dairy wastewater is spread on disposal areas for percolation and evaporation. Manure produced on the dairy is hauled away on a frequent, regular basis.

The dairy overlies the San Jacinto Intake and Upper Pressure Groundwater Subbasin. The beneficial uses of this Subbasin are municipal and domestic supply, agricultural supply, industrial service supply and industrial process supply. Surface drainage in this area is tributary to Reach 4 of the San Jacinto River. The beneficial uses of Reach 4 of the San Jacinto River are agricultural supply, groundwater recharge, water contact recreation, non-contact water recreation, cold freshwater habitat and wildlife habitat.

Need For Waste Discharge Requirements:

Wastes in surface runoff from CAFOs in the San Jacinto Basin drain to the San Jacinto River, Canyon Lake and Lake Elsinore. Both Canyon Lake and Lake Elsinore are included on the Clean Water Act (CWA) Section 303(d) list of impaired waters due to excessive levels of nutrients. Nutrients from CAFOs is believed to be a significant contributor to excessive algae blooms in both Lakes. These algae blooms impair the recreational beneficial uses of both Lakes as well as deplete oxygen in the water column, causing fish kills. There are significant impacts to the local economy when there are algae blooms and/or fish kills in Canyon Lake and Lake Elsinore. In addition, Canyon Lake is included on the CWA Section 303(d) list as impaired due to elevated levels of pathogens. As with nutrients, runoff from CAFOs may be a significant source of pathogens that impair the recreational uses of Canyon Lake. Proper management of wastes from CAFOs is essential to protect the surface and groundwater resources of the Region.

Beginning in 1972, and continuing through 1994, the Board's regulatory approach was to issue individual waste discharge requirements to each CAFO. Changes in the location, size, number of animals, or operator of these facilities necessitated rescinding existing waste discharge requirements and issuing new requirements.

When Mr. Tuls' previous waste discharge requirements were mistakenly rescinded and Mr. Tuls was authorized to discharge waste under Order No. 99-11, he was required to comply with the same waste discharge requirements as other dairies in the region. He no longer had waste discharge requirements that required the implementation of the environmental mitigations that the Regional Board previously determined was necessary. This, in addition to the public controversy that still exists regarding fly and odor conditions, necessitates the

issuance of an individual National Pollutant Discharge Elimination System (NPDES) permit at a public hearing.

Proposed Waste Discharge Requirements:

Proposed Order No. R8-2002-0027 contains the same waste discharge requirements that are included in the general NPDES permit, Order No. 99-11, and also includes the environmental mitigations that were previously incorporated in Order No. 93-71. These environmental mitigations include development and implementation of a site specific groundwater monitoring program or participation in a comprehensive regional groundwater monitoring program, implementation of fly and odor mitigation measures, and submittal of quarterly reports on the fly and odor mitigation measures. Order No. R8-2002-0027 would also require Mr. Tuls to develop and implement an Engineered Waste Management Plan (EWMP) acceptable to the Executive Officer. Mr. Tuls submitted a draft EWMP for this facility on March 14, 2002. The draft EWMP was developed in accordance with the revised EWMP Guidelines for Concentrated Animal Feeding Operations (February 2001). The draft EWMP, which is currently under review by Regional Board staff, describes control measures necessary to prevent the discharge of any process wastewater from the facility.

Proposed Order No. R8-2002-0027 allows Mr. Tuls two options to comply with the groundwater monitoring requirement. Both options will require the submittal of a workplan for groundwater monitoring within 90 days of the adoption of this order. The workplan must meet criteria stipulated in the proposed order.

Basis for Discharge Limitations:

In compliance with the Clean Water Act (CWA) and the California Code of Regulations, proposed Order No. 2002-0027 prohibits discharges to any surface water bodies, or tributaries thereof, unless rainfall events, either chronic or catastrophic, cause an overflow of process wastewater from a facility designed, constructed and operated to contain all process wastewater plus the runoff from a 25-year, 24-hour rainfall event. (Title 27, Chapter 7, Subchapter 2, Article 1, Section 22562(a), California Code of Regulations and 40 CFR Part 412).

The CWA also requires all states to conduct water quality assessments of their water resources to identify waterbodies that do not meet water quality standards. The waterbodies that do not meet water quality standards are placed on a list of impaired waters pursuant to the requirements of Section 303(d) of the CWA. The Regional Board placed Lake Elsinore and Canyon Lake on the 303(d) list of impaired waters in 1994. Lake Elsinore and Canyon Lake are the terminal points for the San Jacinto watershed. The beneficial uses of these Lakes include:

Lake Elsinore:

a. Water contact recreation;
b. Non-contact water recreation;
c. Warm fresh water habitat; and
d. Wildlife habitat.

Canyon Lake:

a. Water contact recreation;
b. Non-contact water recreation;
c. Warm freshwater habitat;
d. Wildlife habitat;
e. Municipal and domestic supply;
f. Agricultural supply; and
g. Groundwater recharge

Water quality problems adversely affecting these uses for both Lakes are caused, in part, by nitrogen, phosphorus and pathogens. Federal regulations require that a Total Maximum Daily Load (TMDL) be established for each 303(d) listed waterbody for each of the pollutants causing impairment. The TMDLs for Lake Elsinore and Canyon Lake are scheduled to be established by 2004. In the absence of TMDLs, waste discharge requirements must include measures /limitations necessary to ensure that discharges do not contribute to the water quality problems in impaired waters.

Antidegradation Analysis:

In adopting waste discharge requirements, the Regional Board is required to consider federal and state antidegradation policies (40 CFR 131.12 and State Board Resolution No. 68-16, respectively). The State Board has interpreted Resolution No. 68-16 to incorporate the federal antidegradation policy in situations where the federal policy applies, i.e., discharges that might affect surface waters. Resolution No. 68-16 stipulates that existing high water quality (i.e., quality that exceeds established objectives) must be maintained unless it is adequately demonstrated that a lowering of water quality would be consistent with the maximum benefit to the people of the State, would not unreasonably affect present and potential beneficial uses, and would not result in water quality less than established objectives.

Discharges from the Tuls Dairy have the potential to affect surface waters that are included on the Clean Water Act Section 303(d) list of impaired waters as the result of nutrients and other pollutants. Therefore, the surface waters affected by discharges from the facility are not high quality, as defined in Resolution No. 68-16 and no further antidegradation analysis with respect to surface waters is necessary.

The Regional Board conducted extensive TDS and nitrate studies using computer models to determine acceptable salt loading rates to groundwater from various land uses, including dairies and other concentrated animal feeding operations. These groundwater studies indicate that if the requirements specified in the proposed order are met, the water quality of the Region is not expected to degrade as a result of discharges authorized under this order.

Discharges in conformance with the terms and conditions of the proposed order should not adversely impact beneficial uses. The Regional Board, in establishing the requirements in the proposed order, has taken into consideration the requirements of the State and Federal antidegradation policies and has determined that the discharges are in conformance with the antidegradation policies.

RECOMMENDATION:

Adopt Order No. R8-2002-0027.

Comments were solicited from the agencies and/or persons on the attached mailing list.

California Regional Water Quality Control Board
Santa Ana Region

ORDER NO. R8-2002-0027
NPDES NO. CA8000397

WASTE DISCHARGE REQUIREMENTS FOR JACK TULS, dba JACK TULS & SONS DAIRY

The California Regional Water Quality Control Board, Santa Ana Region (hereinafter Regional Board) finds that:

1. Jack Tuls (hereinafter, discharger) submitted a report of waste discharge dated June 6, 2002, for waste discharges from an existing dairy at 38980 Record Road in the San Jacinto area of Riverside County.

2. Revised regulations governing discharges from Concentrated Animal Feeding Operations (CAFO), including dairies, are contained in Division 2, Title 27 of the Combined State Water Resources Control Board/California Integrated Waste Management Board AB 1220 Regulations, which became effective on July 18, 1997. Chapter 7, Subchapter 2 (Article 1) contains requirements for Confined Animal Facilities.

3. Section 402 of the Clean Water Act (CWA) as amended by the Water Quality Act of 1987 and the related regulations published by the U.S. EPA on November 16, 1990 (40CFR Parts 122, 123 and 124), requires a National Pollutant Discharge Elimination System (NPDES) permit for pollutant discharges from CAFOs. The EPA's Effluent Guidelines and Standards for Feedlots are contained in 40 CFR Part 412 (revised July 1, 1993).

4. The Regional Board adopted a revised Water Quality Control Plan (Basin Plan) on March 11, 1994. The Basin Plan specifies beneficial uses and water quality objectives for surface and ground waters in the Santa Ana Region (Chapters 3 and 4). This Order specifies requirements necessary to meet the water quality objectives and to protect the beneficial uses.

5. This dairy overlies the San Jacinto Intake and Upper Pressure Groundwater Subbasin, the beneficial uses of which include:

   a. Municipal and domestic supply,
   b. Agricultural supply,
   c. Industrial service supply, and
   d. Industrial process supply.

6. Surface drainage in the area of this dairy is tributary to the San Jacinto River, Reach 4, the intermittent beneficial uses of which are:

   a. Agricultural supply,
   b. Groundwater recharge,
   c. Water contact recreation,

d. Non-contact water recreation,
e. Cold freshwater habitat, and
f. Wildlife habitat.

7. Wastes from CAFOs contain high concentrations of salts (total dissolved solids and nitrates). Previous studies conducted by the Regional Board have shown that cow manure produced in the Region contains about 160 pounds of salt per (dry) ton of manure (110 pounds of salt per ton of manure at 33% moisture). The application of manure or the discharge of process wastewater to land results in the discharge of salts that has impacted, and continues to adversely impact, the quality of groundwater and surface water in the Region.

8. Discharges of storm water from the Tuls Dairy may impact Lake Elsinore and Canyon Lake in the San Jacinto Watershed. These lakes are listed as impaired waters, under Section 303(d) of the Clean Water Act. Federal regulations require that a total maximum daily load (TMDL) be established for 303(d) listed waterbodies for each pollutant of concern. Discharges cannot cause or contribute to water quality or beneficial use impairment.

   The TMDLs for Lake Elsinore and Canyon Lake are scheduled to be established by 2004. These TMDLs, will specify waste load and load allocation for all significant sources of the pollutants causing impairment. This is expected to include allocations for dairy discharges, including those from the Tuls facility. These TMDLs will also specify an appropriate mitigation plan that may include provisions for offset or pollutant trading. Therefore, this Order will be reopened to include requirements necessary to implement the adopted TMDLs.

9. In accordance with Water Code Section 13389 the issuance of waste discharge requirements for this discharge are exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000 et seq.) in accordance with Section 15301, Chapter 3, Title 14, California Administrative Code.

10. A draft Engineered Waste Management Plan, dated March 14, 2002, which describes the various elements of waste management at the site, has been submitted to the Regional Board for review.

11. The approximate animal population of this dairy are as follows:

    a. 2617 milking cows
    a. 281 dry cows
    b. 300 heifers

12. The dairy consists of:

    a. Dairy acreage (buildings, corrals, etc.)…….76
    b. Cropland acreage……..72
    c. Pond Acreage…...……...8
    d. Total acreage……...156

13. Based on 42 gallons of washwater per milking cow per day, approximately 113,400 gallons per day of dairy washwater are generated.

14. Approximately 31,755 tons of manure will be generated annually.

15. The requirements contained in this Order are necessary to implement the Water Quality Control Plan, the provisions of AB 1220 Regulations, Division 2, Title 27, Chapter 7, and 40 CFR Part 412.

16. The Regional Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for Jack Tuls & Sons Dairy and has provided them with an opportunity to submit their written views and recommendations.

17. The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder and the provisions of the Clean Water Act as amended, and regulations and guidelines adopted thereunder, the discharger, the discharger's agents, successors, and assigns, discharging wastes from this CAFO, shall comply with the following:

A. DISCHARGE SPECIFICATIONS:

1. The discharger shall design, construct and maintain containment structures to retain all process wastewater[1] within its facility, including all process generated wastewater and all precipitation on, and drainage through, manured areas resulting from storms up to and including a 25-year, 24-hour, rainfall event.

2. The discharger shall develop and fully implement an Engineered Waste Management Plan (EWMP) acceptable to the Executive Officer. A registered professional engineer, or other qualified individual, shall develop the EWMP in accordance with current guidelines authorized by the Executive Officer (in Attachment "A" of this Order). The Executive Officer is hereby authorized to make necessary revisions to these guidelines for the preparation of an EWMP.

3. The facility shall be protected from inundation or washout by overflow from any stream channel during a 20-year frequency peak stream flow event. If the facility is already protected against a 100-year peak stream flow event, then it must continue to be protected against a 100-year peak flow event.

4. All surface drainage from outside of the facility shall be diverted away from any manured areas unless such drainage is fully contained on the facility.

[1] Process wastewater shall mean any process generated wastewater and any precipitation (rain or snow) which comes into contact with any manure, litter or bedding, or any other raw material or intermediate or final material or product used in or resulting from the production of animals or poultry or direct products (e.g. milk, eggs).

5. All manure generated at this site shall be hauled away within 30 days and properly used as fertilizer or disposed of so as not to adversely affect water quality or create nuisance conditions. A manifest of the manure hauled away shall be prepared and submitted with the Annual Report in accordance with Monitoring and Reporting Program R8-2002-0027.

6. Neither the treatment nor the discharge of dairy waste shall create, or threaten to create, a nuisance or pollution as defined by Section 13050 of the California Water Code.

7. The discharger shall develop and implement a fly and odor mitigation measure plan, acceptable to the Executive Officer, within 30 days from adoption of this Order. This plan shall include, but not be limited to, frequent tilling of the manure in the corrals and periodic spraying and baiting of appropriate areas by a registered pesticide applicator. The discharger may implement additional measures or substitute alternate fly and odor mitigation measures with prior approval of the Executive Officer.

B. DISCHARGE PROHIBITIONS:

1. The discharge to any surface water bodies, or tributary thereof, of process wastewater or runoff having come in contact with manure is prohibited unless a chronic or catastrophic rainfall causes overflow from a storage facility designed, constructed, maintained and operated to contain all process generated wastewater plus the runoff from a 25-year, 24-hour, rainfall event.

2. No containment structure shall be constructed of manure, and manure shall not be used to improve or raise existing containment structures.

3. Disposal of manure to land is prohibited, unless allowed by separate waste discharge requirements issued by the Regional Board.

4. The discharge of wastes to lands not owned or controlled by the discharger is prohibited.

5. The use of manure as a fertilizer in any area that may affect a groundwater subbasin lacking assimilative capacity, is prohibited unless a plan which mitigates the effects of that use on the underlying groundwater subbasin is implemented with prior approval from the Executive Officer.

6. Manure applied to cultivated cropland that may affect a groundwater subbasin lacking assimilative capacity, shall not exceed agronomic rates and shall be incorporated into the soil soon after application, or appropriate containment controls must be provided (based upon the specific crop grown). For any application of manure to cropland in excess of 12 dry tons per acre per year (17.5 tons/year at 33% moisture), an explanation of the type of crop and the number of times it is harvested per year shall also be included in the annual report.

7. The discharge of highly saline wastes is prohibited.

8. The raising of calves at this dairy is prohibited.

9. The increase of the total dairy animal population beyond 3,200 animals is prohibited.

C. PROVISIONS:

1. This Order shall serve as a National Pollutant Discharge Elimination System (NPDES) permit pursuant to Section 402 of the Federal Clean Water Act or amendments thereto, that shall become effective 10 days after the date of its adoption, provided the Regional Administrator of the Environmental Protection Agency has no objection. If the Regional Administrator objects to its issuance, this Order shall not become effective until such objection is withdrawn.

2. All discharges from the facility must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding discharges of storm water to storm drain systems or other courses under their jurisdiction.

3. Storm flows in excess of a 25-year, 24-hour rainfall event and/or storm flows resulting from chronic, or catastrophic events may be discharged to surface water bodies in accordance with the requirements specified in U.S. Environmental Protection Agency's "Effluent Guidelines and Standards for Feedlot's, 40 CFR Part 412".

4. The discharger shall comply with all Federal, State, County and local laws and regulations pertaining to the discharge of wastes from the facility.

5. This Order expires on September 1, 2007 and the discharger must file a Report of Waste Discharge in accordance with Title 23, Division 3, Chapter 9 of the California Code of Regulations not later than 180 days in advance of such expiration date. The Report of Waste Discharge shall serve as the application for issuance of new waste discharge requirements.

6. The requirements prescribed herein do not authorize the commission of any act causing injury to the property of another, nor protect the discharger from liabilities under Federal, State, or local laws, nor guarantee the discharger a capacity right in the receiving waters.

7. This Order does not convey any property rights of any sort, or any exclusive privilege.

8. This Order is not transferable to any person except after notice to, and approval by the Executive Officer. The Regional Board may require modification or revocation and re-issuance of this Order to change the name of the discharger and incorporate such other requirements as may be necessary under the CWA.

9. In the event of any change in the operator or property ownership of this facility, the discharger shall notify the succeeding operator or owner of the existence of this Order by letter, a copy of which shall be forwarded to this Regional Board.

10. The discharger shall take all reasonable steps to minimize or prevent any discharge that has a reasonable likelihood of adversely affecting human health or the environment.

11. Any instance of noncompliance with this Order constitutes a violation of the Clean Water Act (CWA), its regulations, and the California Water Code, and is grounds for enforcement action.

12. The provisions of this Order are severable, and if any provision of this Order, or the application of any provisions of this Order to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Order shall not be affected thereby.

13. It shall not be a defense for the discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this order.

14. Compliance determination with the terms of this Order shall be based on the following:

    a. Periodic inspections by Regional Board staff;
    b. Evaluation of the annual report of animal waste and storm water discharge submitted according to the attached monitoring and reporting program; and
    c. Any other information deemed necessary by the Executive Officer.

15. The discharger shall comply with the attached Monitoring and Reporting Program No. R8-2002-0027.

16. A groundwater monitoring plan shall be submitted within 90 days of the adoption of this Order for the approval of the Executive Officer of the Regional Board. At a minimum, this plan shall include the following:

    a. The location of at least two down-gradient and one up-gradient monitoring wells;
    b. Construction details of the selected monitoring wells including depth, current groundwater level and screen intervals;
    c. A time schedule for installation of the proposed monitoring wells; and
    d. A proposal for routine sampling of the monitoring wells.

    The groundwater monitoring plan shall be implemented in accordance with the time schedule approved by the Executive Officer.

    Participation in a comprehensive regional groundwater monitoring program, acceptable to the Executive Officer, may be considered in lieu of the development and implementation of the above plan. The discharger shall be responsible for the timely submittal of groundwater monitoring reports as described in the Monitoring and Reporting Program, No. R8-2002-0027.

17. The Regional Board, USEPA, and other authorized representatives shall be allowed:

    a. Entry upon premises where the regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order;
    b. Access to copy any records that are kept under the conditions of this Order;

c. To inspect any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and
d. To photograph, sample, and monitor for the purpose of assuring compliance with this Order, or as otherwise authorized by the CWA.

D. PERMIT REOPENING, REVISION, REVOCATION, AND RE-ISSUANCE:

1. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal CWA, or amendments thereto, the Board will revise and modify this Order in accordance with such standards. This Order will be reopened to implement appropriate requirements of applicable TMDLs for the San Jacinto Watershed.

2. This Order may be reopened to address any changes in State or Federal plans, policies or regulations that would affect the requirements for the discharges.

3. This Order may be revised, revoked, reissued, and/or terminated under certain conditions, including, but not limited to, the following:

a. A change in the ownership, operation, animal population, or location of the facility;
b. Violation of any terms or conditions contained in this Order;
c. Failure to submit any reports in the reporting program or to disclose fully any relevant facts; and
d. If the acquisition of land for improvement of the San Jacinto River (flood control channel) causes the dairy to diminish its capacity to contain their wastes or be protected from a 100-year peak flow event in the River.

D. PENALTIES:

1. The CWA provides that any person who violates a provision implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the CWA, or any permit condition or limitation implementing any such sections in this permit, is subject to a civil penalty not to exceed $25,000 per day for each violation. The CWA provides that any person who willfully or negligently violates a provision implementing these sections of the CWA is subject to criminal penalties of $2,500 to $25,000 per day of violation, or imprisonment of not more than 1 year, or both. Any person who knowingly violates a provision implementing these sections is subject to criminal penalties of $5,000 to $50,000 per day of violation, or imprisonment for not more than 2 years, or both.

2. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than 2 years per violation, or by both.

3. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than 2 years per violation, or by both.

4. The California Water Code provides that any person who violates a waste discharge requirement or a provision of the California Water Code is subject to civil penalties of up to $5,000 per day, $10,000 per day, or $25,000 per day of violation, or when the violation involves the discharge of pollutants, is subject to civil penalties of up to $10 per gallon per day, or $20 per gallon per day of violation; or some combination thereof, depending on the violation, or upon the combination of violations.

E. REQUIRED REPORTS AND NOTICES:

1. Reporting Provisions:

   a. All applications, annual reports, or information submitted to the Regional Board shall be signed and certified in accordance with 40 CFR 122.22.
   b. The discharger authorized to discharge waste under this Order shall furnish, within a reasonable time, any information the Regional Board or EPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit. The discharger shall also furnish to the Regional Board, upon request, copies of records required to be kept by this Order.
   c. Except for data determined to be confidential under Section 308 of the CWA, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Regional Water Quality Control Board and the Regional Administrator of USEPA. As required by the CWA, effluent data shall not be considered confidential. Knowingly making any false statements on any such report may result in the imposition of criminal penalties as provided for in Section 309 of the Act and Section 13387 of the California Water Code.

2. The discharger shall notify the Regional Board by telephone within 24 hours of any off-property discharge of facility wastewater. This notification shall be followed by a written report including the following:

   a. The approximate date and time of the discharge;
   b. An estimate of the flow rate and duration of the discharge;
   c. Source of the waste discharge; and
   d. A time schedule and a plan to implement necessary corrective actions to prevent the recurrence of the discharge.

3. The discharger shall report promptly in writing to the Executive Officer of the Regional Board any changes or proposed changes in:

   a. The control, ownership, operation or location of the dairy;
   b. The character, location, volume or disposal methods of waste discharges; and
   c. Changes to the facility that impact process wastewater containment capability.

4. The discharger shall give advance notice to the Regional Board of any planned changes in the permitted facility or activity that may result in noncompliance with this Order.

I, Gerard J. Thibeault, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, Santa Ana Region, on September 6, 2002.

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Gerard J. Thibeault
Executive Officer

Attachment "A"
To
Order No. R8-2002-0027, NPDES No. CA8000397
Jack Tuls

Guidelines for the Development of Engineered Waste Management Plans for Concentrated Animal Feeding Operations
(Dairies and Related Facilities)

California Regional Water Quality Control Board
Santa Ana Region

February 2001

Introduction

On August 20, 1999, the California Regional Water Quality Control Board, Santa Ana Region (Board), adopted Order No. 99-11 (NPDES No. CAG018001), General Waste Discharge Requirements for Concentrated Animal Feeding Operations (Dairies and Related Facilities) in the Santa Ana Region. This order required all operators of dairies and related facilities (i.e., heifer ranches and calf nurseries) authorized to discharge wastes under Order No. 99-11 to develop and implement an engineered waste management plan (EWMP). The primary purpose of an EWMP is to provide a wastewater management system that is designed, constructed, operated and maintained to comply with the wastewater containment requirements in Order No. 99-11. Order No. 99-11 includes applicable state and federal regulations that address waste discharges from animal feeding operations.

Background

The Board began issuing waste discharge requirements to all animal feeding operations in the Region in 1972. These waste discharge requirements stated that each facility had to contain, on the property, all wastewater (i.e., dairy wash water, storm water runoff from manured areas, etc.), including the storm water runoff from a 24-hour, 25-year storm. In an attempt to comply with this requirement, many facilities constructed new ponds, enlarged existing ponds, constructed berms, and implemented other measures. However, these measures were generally implemented in a piecemeal fashion, usually on an as-needed basis, and often did not integrate well with other wastewater containment measures at the facility. It became more and more apparent that many of the wastewater containment improvements that were being made were not very effective. For example, ponds were not sized properly, and, therefore, did not have sufficient capacity to contain the entire volume of wastewater generated at the site; berms were sized and constructed improperly, resulting in failures; wastewater pumps, pipelines, etc., were often inoperable and were not replaced when needed; and most wastewater containment structures and equipment were often in a state of disrepair. All of these situations resulted in frequent discharges of wastewater to surface waters, primarily during the winter.

To minimize discharges to surface waters, it became apparent that an overall plan for containing wastewater was necessary. In the late 1980's, Board staff prepared a two-page document that provided guidelines for preparing an EWMP. An EWMP was then generally requested from animal feeding operations that had a history of recurring wastewater discharges. In 1994, the Board adopted Order No. 94-7 (NPDES No. CAG018001), General Waste Discharge Requirements for Concentrated Animal Feeding Operations (CAFOs). Order No. 94-7 required that, in addition to an EWMP being

required from CAFOs that had a history of recurring wastewater discharges, EWMPs were to be prepared by anyone initiating a new CAFO at either a new or existing facility. The guidelines for preparing an EWMP were then included as an attachment to Order No. 94-7. Order No. 94-7 expired in March 1999, and the Board adopted Order No. 99-11 in August 1999. To assure that every CAFO had a wastewater management system capable of complying with wastewater containment requirements, Order No. 99-11 required that all CAFO operators develop and fully implement an EWMP. The existing guidelines for preparing an EWMP were included as an attachment to Order No. 99-11. However, the existing EWMP guidelines were outdated, general in nature, and did not contain sufficient criteria to comply with the wastewater containment requirements in Order No. 99-11. Therefore, Order No. 99-11 authorized the Executive Officer to make necessary revisions to the guidelines.

These revised guidelines are longer than the previous guidelines. This is primarily the result of adding explanations and clarification to make EWMPs prepared in accordance with the guidelines as consistent as possible. There are two significant differences between these guidelines and the previous guidelines. First, the new guidelines outline criteria for determining the storage capacity necessary to comply with waste discharge requirements. These criteria will result in the need for significantly more storage capacity than the criteria included in the previous guidelines. However, this does not reflect a change in state or federal regulations. Instead, previous guidelines did not accurately specify criteria for determining the storage capacity necessary to comply with state and federal regulations. Regardless of what was included in previous guidelines, CAFOs have always been, and still are, required to comply with all applicable state and federal regulations. Second, the new guidelines identify several items (such as best management practices) that should be considered in the development and implementation of EWMPs. Many of these items have been included in EWMPs approved by the Executive Officer in the past.

Purpose

The purpose of an EWMP is to provide a wastewater management system that is designed, constructed, operated and maintained to comply with the wastewater containment requirements in Order No. 99-11. These guidelines do not address the management, application or disposal of manure removed from the corrals. Compliance with waste discharge requirements associated with the discharge of manure removed from corrals is addressed separately. The development and implementation of an EWMP is required by Order No. 99-11. Discharges of wastewater from a CAFO are allowed only if the CAFO operator has constructed and maintained containment structures as required, and if a chronic or catastrophic rainfall event occurs. A chronic rainfall event is a series of wet weather conditions that would total the volume of the 24-hour, 25-year storm event, and would not provide reasonable opportunity for dewatering containment structures prior to the next storm events. A catastrophic storm event includes events such as tornadoes and hurricanes, and any single event that totals the runoff volume of the 24-hour, 25-year storm event. Order No. 99-11 requires that an EWMP be developed in

accordance with guidelines established by the Executive Officer. However, these are guidelines, not regulations, and any EWMP that will result in compliance with waste discharge requirements will be acceptable by the Executive Officer. Adhering to these guidelines, though, will provide consistency for preparing EWMPs, and will increase the likelihood that the EWMP will be acceptable.

Elements of an EWMP

The EWMP must be prepared by a registered engineer (civil, or other appropriate discipline) or other qualified person (required by Order No. 99-11). The qualified person preparing the EWMP must have the knowledge, technical expertise and experience appropriate to develop an EWMP. This guidance document describes five basic elements that should be addressed in an EWMP. These elements include an introduction, a design, a plot (site) plan, construction specifications, and an operation and management plan. These elements should include a detailed description, as follows:

I. Introduction

The introduction should describe the existing animal population, the design population for the EWMP, existing wastewater containment facilities, and the operation of those facilities. At a minimum, the Introduction should consist of a brief narrative that addresses the following:

- the facility address, operator name, land owner, and location of the facility with respect to cross streets or other landmarks
- the name, telephone number and address of the person responsible for implementing the EWMP on an on-going basis (CAFO operator or other designated person)
- the name, telephone number and address of the person(s) to be contacted, if necessary, in the event that the CAFO operator or designated person is not available.
- current and design animal population (for the expected life of the CAFO)
- the estimated volume of wash water generated at the facility each day (based on gallons per cow per day)
- total size of the facility (acres)
- the size (acres) of existing ponds, corrals, wastewater disposal areas and wastewater containment areas
- general location and height of berms
- how dairy wastewater is managed and where it is discharged
- storm water run-on problems (storm water that occurs off-site, but enters the CAFO), including run-on from neighboring facilities, etc.

II. Design

To comply with Order No. 99-11, containment facilities must be designed to contain all wastewater generated at the facility (i.e., dairy wash water, storm water runoff from manured areas, etc.) and all storm water runoff that comes into contact with manure generated by a 24-hour, 25-year storm. A 24-hour, 25-year storm is a 24-hour storm with a return frequency of once every 25 years. The design must take into consideration that this storm can and should be expected to occur each year. CAFOs are required to contain the storm water runoff from all lesser storms, if that runoff has come into contact with manure.

If a CAFO does not have existing structures capable of containing the required volume of wastewater, then additional structures must be provided. This may include significantly deepening existing ponds, adding additional ponds, connecting to a sewer system, raising berms to increase the volume of wastewater that can be stored in containment areas, etc. An EWMP may be acceptable if the design has maximized the amount of wastewater that can be contained and the operation and management plan optimizes utilization of the containment capacity provided by the containment structures. **However, acceptance of such a plan will not relieve the CAFO operator of responsibility for any discharges that are not allowed by Order No. 99-11. Wastewater that is discharged off the CAFO property, even after implementing an acceptable EWMP, is still a violation of Order No. 99-11, unless the discharge occurred as a result of a chronic or catastrophic storm event.**

- Historically, containment of wash water and storm water runoff at CAFOs in the Region between the drier months of April through October has not been a problem. However, containing storm water runoff from corrals, wastewater disposal fields, etc., and daily wash water, has been problematic during the five generally wet months of November through March. During these months, evaporation is minimal, and since disposal fields are usually saturated by rainfall, percolation is minimal. Since it is difficult to dispose of daily wash water and accumulated storm water runoff during these months, wastewater facilities should be designed to contain all wastewater generated during this 150-day period, as noted below.

- Containment structures should be designed to contain 150 days of annual storm water runoff and the runoff from a 24-hour, 25-year storm. For the Chino Basin area, average rainfall for the 150 days from November through March is approximately 13 inches, and a 24-hour, 25-year storm generates approximately 4.5 inches of precipitation (based on information from the National Weather Service). For the San Jacinto area, average annual rainfall for the 150 days from November through March is approximately 11 inches, and a 24-hour, 25-year storm is approximately 3.5 inches. These are average values for these areas, and other values can be used for a particular CAFO, if justification is provided.

- Containment structures should be designed to contain 150 days of wash water. This should be based on the maximum number of milking cows for the life of the facility. Otherwise, the EWMP may have to be revised in the future, at such time that the number of milking cows exceeds the number of cows stated in the EWMP. Recent

studies have shown that the average daily wash water generated at dairies in the Region is about 70 gal/cow/day (based on two milkings/cow/day). The average daily wash water produced during winter months, however, can exceed 100/gal/cow/day. The average gal/cow/day used during the winter should be used in determining the volume of storage required for wash water. This volume can vary, depending on specific site practices, but should be about 100 gal/cow/day unless adequate justification is provided for using a smaller number. The installation of a water meter can verify the amount of water used and assist in efforts to conserve water usage, and thereby reduce the amount of water discharged to containment structures. A wash water meter will be required to justify a volume significantly less than 100 gal/cow/day.

- During the winter, evaporation is minimal. Also, ponds tend to seal up over time, and disposal fields are generally saturated during the winter, thereby minimizing percolation. In addition, the amount of wastewater percolated during the winter at a CAFO can vary, depending on the particular wastewater disposal practices implemented at that CAFO. Allowances for loss of wastewater due to percolation and evaporation can be made in determining the amount of storage required for wastewater, as long as reasonable assumptions are made that consider winter conditions and practical CAFO specific wastewater disposal practices.

- The accumulation of solids in ponds and other containment structures decreases the storage capacity available for wastewater. It is estimated that dairy wash water in the Region contains about 10% of the manure generated by a milking cow. Also, solids are present in storm water runoff from corrals, disposal land and other areas. The estimated annual decrease in available storage capacity resulting from the accumulation of these solids should be determined (the volume of manure in wash water can be considered to be 10% of what a milking cow expels).

- Calculations should be provided showing the design capacity of all wastewater containment structures (existing and proposed).

- The total capacity of the containment structures should be at least equal to the volume determined by the following equation: 150 days dairy wash water + 150 days annual storm water runoff + 24-hour, 25-year storm runoff + accumulation of solids + wastewater in containment structures on November 1– percolation – evaporation.

- A description of all wastewater conveyance equipment and structures (pipelines, surface channels, pumps, etc.), including their design capacities, should be provided.

- CAFOs in operation prior to November 27, 1984 must be designed to protect all manured areas from inundation or washout by overflow from any stream channel during a 20-year peak stream flow (required by Order No. 99-11).

- CAFOs built after November 27, 1984 must be designed to protect all manured areas from inundation or washout by overflow from any stream channel during a 100-year peak stream flow (required by Order No. 99-11).

- The use of pumps must be considered for ponds and other containment structures so that wastewater can be pumped from ponds or containment areas to disposal areas, in order to restore needed capacity in the containment structures. If pumps are not utilized, exceptional justification for not utilizing pumps must be included.

- Storm water containment structures must be protected against inundation from off-site stormwater sources, unless such run-on is fully contained (required by Order No. 99-11). If it is not practical to divert all storm water run-on away from a CAFO, a justification should be included that explains why it is not practical to do so. If all storm water run-on from up to a 24-hour, 25-year storm cannot be diverted from containment structures, a description of how the design takes the run-on into consideration should be included.

- The addition of roof structures in areas where manure is present, and diverting the roof runoff off site, should be considered in order to minimize the amount of precipitation that comes into contact with manure.

- Structures should be designed to prevent storm water runoff from non-manured areas (roofs, residence area, paved surfaces, etc.) from entering wastewater containment structures. The use of rain gutters and diversion trenches should be considered. If the CAFO cannot be designed to prevent or minimize the flow of this water onto containment areas, an explanation should be provided that describes how the design accounts for such flows.

- The design for ponds and other wastewater containment areas should allow vehicle access for mosquito abatement personnel to inspect and treat these areas to reduce the risk of mosquito-borne disease and to prevent insect nuisance conditions.

- An emergency spillway must be designed to provide for a controlled release of wastewater, and to maintain the integrity of existing containment structures, in the event that storm events cause the capacity of the containment structures to be exceeded. The use of gateways, valves, or other similar devices for the purpose of manually releasing wastewater, is not acceptable.

- If visual observations, hand-level measurements and information provided by the CAFO operator and others are not sufficient to determine rise and fall dimensions and flow directions for adequately calculating runoff volumes for placing and sizing appropriate containment structures, then current contours must be determined, based on acceptable engineering and surveying practices (it is expected that current contours will be necessary for most CAFOs).

- Structures should be designed to accommodate future increases in animal population.

III. Plot (Site) Plan

The plot plan should be a standard blue line print, using an appropriate scale, that shows sufficient detail of all containment structures, drainage patterns, and equipment. The plot plan should include:

- The legal description of the property (i.e., parcel numbers), the primary address and any other addresses that may exist at the property, and the location of significant structures on the property (residences, milk barn, hay alleys, etc.).

- The property boundaries, the gross acreage of the property, vicinity map (insert), north arrow, legend and date the plan was prepared.

- The location, elevation contours and dimensions of all areas associated with the generation, storage or management of wastewater and manure (corrals, ponds, access roads around wastewater containment areas, wastewater disposal areas, temporary manure storage areas, cropland, etc.).

- The location of all facilities necessary for containment and management of wastewater (berms, upstream diversion structures, pumps, spillway, distribution lines, etc.) and the dimensions, elevation and cross-sections of all containment structures.

- The drainage patterns (indicated by arrows) for on-site surface drainage courses (swales, ditches, etc.) and any off-site surface drainage that can flow onto, or immediately adjacent to, the facility.

IV. Construction

The construction plan should describe all construction materials, construction methods (i.e., compaction), criteria and specifications, etc., necessary for proper construction of all containment and conveyance structures (berms, ponds, levees, pipelines, channels, etc.).

- Existing berms that are not sized properly, not adequately compacted, or contain materials (i.e., manure) that are deleterious to the berm's long term stability and effectiveness, must be replaced or improved to a standard that is equivalent to that which would be expected from a new berm constructed in accordance with best engineering practices.

- Actions necessary to restore existing structures to proper conditions and capacities should be clearly described (i.e., clean out existing ponds or containment areas, regrading, repair or replacement of existing berms, etc.).

- Manure shall not be used to construct new containment structures (i.e., berms), and manure shall not be used to improve or raise existing containment structures (prohibited by Order No. 99-11).

- In accordance with acceptable engineering practices, specifications developed to assure that construction material is applied in lifts of appropriate depth, and rolled and watered to achieve a minimum compaction of 90%, must be included.

V. Operation and Maintenance

An operation and maintenance plan should be provided to implement effective operation of all containment structures and equipment. During the wet season, wastewater should be managed on a daily basis to maximize the volume of containment capacity available.

- Specific procedures should be included to assure that containment structures have the maximum capacity available just prior to the wet season (November – March).

- Management practices to reduce, to the maximum extent practicable, the volume of dairy wash water generated should be addressed, particularly if the proposed structures are incapable of containing the required volume of wastewater.

- Replacement pumps should be available on-site, or advanced arrangements made for the immediate and reliable delivery of portable pumps.

- Specific procedures for operating standpipes or other conveyance systems used for applying wastewater to land should be provided to efficiently utilize the entire area available for wastewater disposal (i.e., avoid localized over-application that can occur with furrow application, and utilize methods to maximize the spreading of wastewater).

- If all storm water run-on cannot be diverted, the EWMP should contain a description of how storm water run-on will be managed or handled to minimize the impact on wastewater containment structures and to minimize the amount of wastewater that could be discharged from the CAFO.

- Specific measures to minimize the effects of gophers, squirrels or other rodents on the integrity of the containment structures should be identified.

- Removal of solids from containment structures on a scheduled basis should be specified so that the design capacity of the containment structures will be restored prior to each rain season.

- Measures for minimizing the accumulation of stagnant wastewater in low lying areas (corrals, disposal areas, etc.) and preventing potential insect nuisance conditions should be addressed.

- Weekly inspections of ponds, berms, wastewater distribution and application equipment, etc., should be specified to provide assurance that all containment structures are intact and all equipment is in proper operating condition. Daily inspections should be conducted following the first significant rain events at the beginning of the wet season (generally in early Fall), continuing through the cessation of significant rain events (generally in early Spring). Provisions for the immediate repair of any damaged containment structures (i.e., rodent holes, cracks, erosion, etc.) should be provided.

- A description of methods and schedules for maintaining disposal areas in a condition that maximizes the efficient disposal of wastewater in the winter should be provided (i.e., grading, disking, etc.).

- An equipment maintenance schedule should be provided to assure the efficient, consistent and reliable operation of all pumps, sumps, pipelines, etc.

- Weed abatement measures to maintain access to containment structures, maintain capacity of containment structures and to maintain the efficient distribution of wastewater through channels, etc., should be addressed.

- A brief emergency spill plan must be included. The plan must include a list of spare parts (pump, piping, valves, etc.) that are to be kept on site to maintain adequate wastewater containment facilities, a list of names and phone numbers for contacts for obtaining immediate emergency equipment (pump, piping, valves, heavy equipment, etc.), and a list of names and phone numbers for reporting problems (Board staff, County staff, etc.).

California Regional Water Control Board
Santa Ana Region

Monitoring and Reporting Program (M. & R.P.) No. R8-2002-0027
NPDES No. CA8000397
for
Jack Tuls, dba Jack Tuls & Sons Dairy

A. MONITORING REQUIREMENTS

1. The discharger shall inspect the waste holding and disposal areas and note any discharges off the property that is under the control of the discharger. Inspections shall be made daily when wastewater is being applied to cropland and during the time period October through April and weekly during other periods. The results of all inspections shall be recorded and submitted with the technical report due each January 15, or more frequently as requested.

2. During each significant rainfall event (i.e., precipitation of equal to or greater than 0.5 inches in 24 hours), the discharger shall make visual inspections of all storm water containment structures.

3. The discharger shall record the approximate date and time of each rainfall-related discharge that results in off-property discharges if storm water has commingled with wastewater or manure, and the approximate duration of the discharge.

4. The discharger shall record each manure hauling event on a manure tracking manifest form supplied by the Regional Board.

B. MITIGATION MEASURE MONITORING

1. Quarterly (i.e., by the 15th day of January, April, July, and October), the discharger shall submit a report detailing fly and odor mitigation measures conducted during the prior quarter. The report shall include:

   a. Dairy-wide Manure Management:

      A discussion regarding the dairy-wide stockpiling/removal of manure, including the length of time manure was stockpiled, and the dates manure was removed.

b. Corral Manure Management:

A discussion regarding corral manure management practices during the quarter, including:

i. The frequency of manure removal, the amount of manure produced during the previous quarter and the amount of manure removed.
ii. The frequency and extent of tilling or other such practices were conducted.
iii. The types, frequency, and amounts of biological manure conditioners used in the corrals.

c. Pesticides:

A discussion regarding the use of pesticides, including the frequency, amounts, and types of pesticides used. Fly abatement activities shall be included in this discussion.

d. Other:

Any other actions taken and any proposed improvements or changes needed for the program.

2. The approved groundwater monitoring wells shall be monitored, at a minimum, for total dissolved solids and nitrates on a semi-annual basis during May and November of each year. The results of the groundwater monitoring program shall be submitted to this office with the January 15 and July 15 reports as described in B.1 above. The discharger shall be ultimately responsible for obtaining a sufficient representative groundwater sample for lab analysis.

C. REPORTING

1. Annually, by January 15 of each year, a technical report, on the form supplied by the Regional Board, shall be submitted which includes the following:

a. The date of the report;

b. The animal population;

c. The total amount of manure (dry weight) produced, stockpiled, spread on disposal land, and hauled away;

d. Copies of all manure tracking manifests for the reporting period which include the date(s) and the destination(s) of manure hauled away, including the name(s) and address(es) of the haulers;

e. The annual report shall be submitted on forms provided by Regional Board staff and shall also include copies of the inspection logs required to be maintained under A.1 and A.4 above;

f. A statement that all wastewater disposal and manured areas have been routinely inspected and are in compliance with the requirements of this order;

g. Any other comments relative to these waste discharge requirements.

2. All reports shall be signed by a responsible officer or duly authorized representative of the discharger and shall be submitted under penalty of perjury.

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Gerard J. Thibeault
Executive Officer

September 6, 2002